## **Director's Cut**

## Lynn Helms NDIC Department of Mineral Resources

August Oil 36,816,555 barrels = 1,187,631 barrels/day September Oil 34,867,577 barrels = 1,162,253 barrels/day (preliminary)(all-time high was Dec 2014 at 1,227,483 barrels/day) 1,106,612 barrels per day or 95% from Bakken and Three Forks 55,641 barrels per day or 5% from legacy conventional pools

August Gas 51,032,167 MCF = 1,646,199 MCF/day September Gas 48,113,551 MCF = 1,603,785 MCF/day (preliminary)(all-time high was July 2015 at 1,660,184 MCFD)

August Producing Wells = 13,031 September Producing Wells = 13,025 (preliminary)(all-time high was August 2015 at 13,031) 10,228 wells or 78% are now unconventional Bakken – Three forks wells 2,797 wells or 22% produce from legacy conventional pools

August Permitting: 153 drilling and 0 seismic September Permitting: 154 drilling and 1 seismic October Permitting: 152 drilling and 1 seismic (all time high was 370 in 10/2012)

August Sweet Crude Price<sup>1</sup> = \$29.52/barrel September Sweet Crude Price = \$31.17/barrel October Sweet Crude Price = \$34.37/barrel Today's Sweet Crude Price = \$31.25/barrel (low-point since Bakken play began was \$22.00 in Dec 2008)(all-time high was \$136.29 7/3/2008)

August rig count 74 September rig count 71 October rig count 68 Today's rig count is 64 (in November 2009 it was 63)(all-time high was 218 on 5/29/2012) (continued next page)

<sup>&</sup>lt;sup>1</sup> Pricing Source: <u>Flint Hills Resources</u>

The statewide rig count is down 71% from the high and in the five most active counties rig count is down as follows:

Divide-69% (high was 3/2013)Dunn-68% (high was 6/2012)McKenzie-65% (high was 1/2014)Mountrail-78% (high was 6/2011)Williams-79% (high was 10/2014)

Comments:

The drilling rig count decreased 3 from August to September, decreased 3 from September to October, and dropped 4 more so far this month. Operators are now committed to running fewer rigs, but drill times and efficiencies continue to improve while oil prices continue to fall. This has resulted in a current active drilling rig count of 12 to 15 rigs below what operators indicated would be their 2015 average if oil price remained below \$65/barrel. The number of well completions rose slightly from 115(final) in August to 123(preliminary) in September. Oil price weakness is now anticipated to last through next year and is the main reason for the continued slow-down. There was one significant precipitation event in the Williston area and one in the Minot area, 5 days with wind speeds in excess of 35 mph (too high for completion work), and no days with temperatures below -10F.

Over 98% of drilling now targets the Bakken and Three Forks formations.

At the end of September there were an estimated 1,091 wells waiting on completion services<sup>2</sup>, 98 more than at the end of August.

Crude oil take away capacity depends on rail deliveries to coastal refineries to remain adequate.

The drop in oil price associated with anticipation of lifting sanctions on Iran and a weaker economy in China is leading to further cuts in the drilling rig count. Utilization rate for rigs capable of 20,000+ feet is about 35% and for shallow well rigs (7,000 feet or less) about 20%.

Drilling permit activity decreased sharply from July to August then remained steady August through October as operators continued to position themselves for low 2016 price scenarios. Operators have a significant permit inventory should a return to the drilling price point occur in the next 12 months.

<sup>&</sup>lt;sup>2</sup> Disclaimer: The number of wells waiting on completions is an estimate on the part of the director based on idle well count and a typical five year average. Neither the State of North Dakota, nor any agency officer, or employee of the State of North Dakota warrants the accuracy or reliability of this product and shall not be held responsible for any losses caused by this product. Portions of the information may be incorrect or out of date. Any person or entity that relies on any information obtained from this product does so at his or her own risk.

The number of rigs actively drilling on federal surface in the Dakota Prairie Grasslands is unchanged at 0.

Activity on the Fort Berthold Reservation is as follows: 11 drilling rigs (2 on fee lands and 9 on trust lands) 204,525 barrels of oil per day (122,086 from trust lands & 82,439 from fee lands) 1,402 active wells (952 on trust lands & 450 on fee lands) 124 wells waiting on completion 539 approved drilling permits (345 on trust lands & 194 on fee lands) 1,888 additional potential future wells (1,328 on trust lands & 560 on fee lands)

Seismic activity is limited to 4 micro-seismic arrays for monitoring and optimizing hydraulic fracturing. There are 4 surveys active/recording, 0 remediating, 0 suspended, and 1 permitted.

North Dakota leasing activity is limited to renewals and top leases in the Bakken - Three Forks area.

US natural gas storage is now 4.5% above the five-year average indicating stable to slightly higher prices in the future. North Dakota shallow gas exploration could be economic at future gas prices, but is not at the current price. The operator of the exploration well (file 27235) in Emmons County has received Temporary Abandoned status on 8/31/15 and cancelled all other permits in the area. The well appears to contain 2 pay sections totaling about 80 feet thick with very good gas shows.

The price of natural gas delivered to Northern Border at Watford City is down \$0.20 to \$1.70/MCF. This results in a current oil to gas price ratio of 18 to 1. The percentage of gas flared was down to 19%. The Tioga gas plant was down slightly to 90% of capacity. Even though the expansion of gas gathering from south of Lake Sakakawea was approved, the approval came too late for the 2015 construction season, resulting in a 1 year delay. The September Bakken capture percentage was 82% with the daily volume of gas flared from August to September down 39.3 MMCFD. The historical high flared percent was 36% in 09/2011. Gas capture statistics are as follows:

Statewide 81% Statewide Bakken 82% Non-FBIR Bakken 82% FBIR Bakken 83% Trust FBIR Bakken 81% Fee FBIR 89% January – December 2015 capture target=77% April 2016 – October 2016 capture target=80% November 2016 - October 2018 capture target=85% November 2018 - October 2020 capture target=88% After October 2020 capture target=91% The North Dakota Legislature passed HB1432 which sets up a council to address Clean Water Act, Safe Drinking Water Act, Clean Air Act, and Endangered Species Act issues:

**BLM** has published a new final rule to revise Onshore Order 4. The proposed rule would replace Onshore Oil and Gas Order Number 4 (Order 4), which sets minimum standards for the measurement of oil. Order 4 has not been updated since 1989, and does not reflect modern industry practices or standards. The proposed rule may be viewed online at <u>www.regulations.gov</u>

Comments on the proposed rule must be submitted by November 30, 2015 through one of the following methods:

Federal eRulemaking Portal: http://www.regulations.gov. Follow the instructions at this Web site.

Mail: U.S. Department of the Interior, Director (630), Bureau of Land Management, Mail Stop 2134 LM, 1849 C Street NW, Washington, DC 20240 Attention: Regulatory Affairs.

Personal/messenger delivery: Bureau of Land Management, 20 M. Street SE, Room 2134 LM, Attention: Regulatory Affairs, Washington, DC 20003. NDIC comments approved 11/12/15 will be posted on the Industrial Commission website soon or you may request a copy from DMR.

**BLM** released a proposed rule on 10/2/15 to update and replace its regulations (Onshore order 5) governing the measurement of natural gas produced from onshore Federal and Indian leases. The requirements contained in the proposed rule reflect advances in measurement technology and critical updates in industry standards and practices. It also responds directly to concerns from the Government Accountability Office (GAO), the Department of the Interior's Office of Inspector General, and Secretary's Subcommittee on Royalty Management, that the BLM's existing rules do not provide adequate assurance that gas production on public and Indian lands is being accounted for in a way that ensures that all royalties are accurately tracked and paid. The proposed rule that would replace Onshore Order 5 may be viewed online at <u>www.blm.gov</u>

Comments on the proposed rule must be submitted by December 14, 2015 through one of the following methods:

Federal eRulemaking Portal: <u>http://www.regulations.gov</u> Follow the instructions at this Web site.

Mail: U.S. Department of the Interior, Director (630), Bureau of Land Management, Mail Stop 2134 LM, 1849 C Street NW, Washington, DC 20240 Attention: Regulatory Affairs.

Personal/messenger delivery: Bureau of Land Management, 20 M. Street SE, Room 2134 LM, Attention: Regulatory Affairs, Washington, DC 20003. NDIC comments approved 11/12/15 will be posted on the Industrial Commission website soon or you may request a copy from DMR.

**BLM** has started the process of new venting and flaring regulations with input sessions in Denver, Albuquerque, Dickinson, and Washington, DC. <u>NDIC comments</u>

**BLM** revised final regulations for hydraulic fracturing on federal and Indian lands were published in the CFR on 3/26/15 and they were scheduled to go into effect 6/24/15. North Dakota, Colorado, Utah, Wyoming, Western Energy Alliance, and IPAA filed for a preliminary injunction to prevent the rules going into effect until the case is settled. Following a lengthy hearing in Casper, Wyoming on Aug 23, the court issued a stay on the rules. On 9/30/15 the court granted the preliminary injunction, preventing the rules from being enforced until litigation on the rule is final. Injunction applicants have filed motions regarding the BLM administrative record. <u>NDIC comments</u>

**BLM** has published a new final rule to revise Onshore Order 3. The proposed rule would change the way federal production is measured and allocated for calculation of royalties, require a federal Application for Permit to Drill (APD) even for state and private wells in a federal unit or communitized area (CA), and revise the situations in which downhole commingling of production from different leaseholds would be allowed. <u>NDIC comments</u>

**BLM** has published the North Dakota Greater Sage-Grouse Proposed Resource Management Plan Amendment and Final EIS. Information on the plan and EIS can be found <u>here</u>.

**EPA** On August 26, 2015 a coalition of environmental organizations filed a 60 day legal notice with the U.S. Environmental Protection Agency demanding more regulation of drilling and fracking waste. The groups are the Environmental Integrity Project, Natural Resources Defense Council, Earthworks, Responsible Drilling Alliance, San Juan Citizens Alliance, West Virginia Surface Owners Rights Organization, and the Center for Health, Environment and Justice. The groups are calling on EPA to comply with its long-overdue obligations to update waste disposal rules such as instituting stricter controls for underground injection wells, banning the practice of spreading fracking wastewater onto roads or fields, and requiring landfills and ponds that receive drilling and fracking waste to be built with adequate liners and structural integrity to prevent spills and leaks into groundwater and streams. **ND is monitoring federal court docket activity intends to intervene to prevent a sue and settle situation that would adversely impact state regulatory jurisdiction.** 

**EPA** on August 18, 2015, EPA proposed a suite of requirements to help combat climate change, reduce air pollution that harms public health, and provide greater certainty about Clean Air Act permitting requirements for the oil and natural gas industry. The proposed actions are:

o Proposed updates to the agency's New Source Performance Standards that would set methane and VOC requirements for additional new and modified sources in the oil and gas industry;

o Draft guidelines for reducing VOC emissions from existing oil and gas sources in certain ozone nonattainment areas as well as in the mid-Atlantic and northeastern states in the Ozone Transport Region;

o Proposed updates to the agency's air permitting rules as they apply to the oil and natural gas industry; and

o A proposed Federal Implementation Plan to implement minor New Source Review permitting in Indian country.

EPA granted a 3 week extension of the comment period to December 4, 2015.

Instructions for submitting comments are below. Please note that each of the proposals has a different docket number. It is important to label your comments with the correct docket number to ensure EPA receives them.

Include the docket number in the subject line if you are emailing or faxing your comments, or on the envelope if you are submitting them by mail.

Here are the docket numbers for the proposed rules and draft guidelines. Please label your comments with the appropriate docket number:

o Proposed New Source Performance Standards – Docket ID number EPA-HQ-OAR-2010-0505

o Draft Control Techniques Guidelines – Docket ID number: EPA-HQ-OAR-2015-0216 o Proposed Source Determination Rule – Docket ID number: EPA-HQ-OAR-2013-0685

o Proposed Federal Implementation Plan for Implementing Minor New Source Review Permitting in Indian Country – Docket ID number: EPA-HQ-OAR-2014-0606 SUBMIT COMMENTS BY ANY OF THE FOLLOWING METHODS

Go to www.regulations.gov, enter the docket number in the search box and click the "Search" button. Then click a "Comment Now!" on the search results page and follow the online instructions for submitting comments.

• Send comments by e-mail to <u>a-and-r-Docket@epa.gov</u> Attention Docket ID No. (fill in the appropriate docket ID number)

• Fax your comments to: (202) 566-9744, Attention Docket ID. No. (fill in the appropriate docket ID number)

• Mail your comments to: Air and Radiation Docket and Information Center, Environmental Protection Agency, Mail code 28221T, 1200 Pennsylvania Ave, NW, Washington, DC 20460, Attention Docket ID No. (fill in the appropriate docket ID number)

• Deliver comments in person to: Hand Delivery: EPA Docket Center, Room 3334, EPA WJC West Building, 1301 Constitution Avenue, NW, Washington, DC 20004. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

• For tips on submitting comments, see <u>http://www2.epa.gov/dockets/commenting-epadockets</u>

NDIC comments will be posted on the Industrial Commission website as soon as they receive final approval, or you may request a copy from DMR.

**EPA** published an advanced notice of proposed rule-making to seek comments on the information that should be reported or disclosed for hydraulic fracturing chemical substances and mixtures and the mechanism for obtaining this information. The proposed rule-making is in response to a petition from Earthjustice and 114 other groups who are opposed to the use of the GWPC-IOGCC FracFocus website process of chemical disclosure and any type of trade secret protection for hydraulic fracturing fluid mixtures. These groups are requesting EPA regulation of chemical disclosure under the federal Toxic Substances Control Act. Thanks to all who provided comments in support of a "states first" policy. <u>NDIC comments</u>

**EPA** Administrator, Gina McCarthy, and the Assistant Secretary of the Army (Civil Works), Jo Ellen Darcy, signed the "Waters of the United States" final rule on 05/27/2015. The final rule was published in the Federal Register Aug 29, 2015 and became effective in 37 states on August 28, 2015. North Dakota, Alaska, Arizona, Arkansas, Colorado, Idaho, Missouri, Montana, Nebraska, New Mexico, Nevada, South Dakota, and Wyoming filed a lawsuit in U.S. District Court, claiming the final rule would harm states as regulators of the waters and lands. On August 27th Federal District Judge Erickson granted a preliminary injunction preventing enforcement of the rule in the 13 states. The North Dakota case will now be subject to appeal, but no schedule has been set at this time. NDIC comments

Texas, Mississippi and Louisiana filed a joint complaint in the U.S. District Court for the Southern District of Texas, charging that the rule is unconstitutional. Ohio and Michigan filed a complaint in the U.S. District Court for the Southern District of Ohio, alleging that the expansion of jurisdiction includes dry land. Georgia and eight other states (Alabama, Florida, Kansas, Kentucky, South Carolina, Utah, West Virginia and Wisconsin) filed suit in the U.S. District Court for the Southern District of Georgia, asking the court to vacate the rule and block its enforcement by injunction. On 10/9/15 the United States Court Of Appeals for the Sixth Circuit granted a nationwide stay of the WOTUS rule pending jurisdiction determinations.

**USFWS** has made a decision to list the Dakota Skipper and Powershiek Skipperling to receive protection under the Endangered Species Act. Additional potential listing of concern are the Rufa Red Knot, Sprague's Pipit, Greater Sage Grouse, Monarch Butterfly, Sturgeon Chub, and Sicklefin Chub.